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<120> Antisense oligonucleotides for treatment of proliferating cells

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acttactgtt tagaaa atg tgg ccc acg aga cgc ctg gtt act atc aaa agg 232
                Met Trp Pro Thr Arg Arg Leu Val Thr Ile Lys Arg
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agc ggg gtc gac ggt ccc cac ttt ccc ctg agc ctc agc acc tgc ttg   280
Ser Gly Val Asp Gly Pro His Phe Pro Leu Ser Leu Ser Thr Cys Leu
          15                  20                  25

ttt gga agg ggt att gaa tgt gac atc cgt atc cag ctt cct gtt gtg   328
Phe Gly Arg Gly Ile Glu Cys Asp Ile Arg Ile Gln Leu Pro Val Val
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tca aaa caa cat tgc aaa gtt gaa atc cat gag cag gag gca ata tta   376
Ser Lys Gln His Cys Lys Val Glu Ile His Glu Gln Glu Ala Ile Leu
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cat aat ttc agt tcc aca aat cca aca caa gta aat ggg tct gtt att   424
His Asn Phe Ser Ser Thr Asn Pro Thr Gln Val Asn Gly Ser Val Ile
                  65                  70                  75

gat gag cct gta cgg cta aaa cat gga gat gta ata act att att gat   472
Asp Glu Pro Val Arg Leu Lys His Gly Asp Val Ile Thr Ile Ile Asp
              80                  85                  90

cgt tcc ttc agg tat gaa aat gaa agt ctt cag aat gga agg aag tca   520
Arg Ser Phe Arg Tyr Glu Asn Glu Ser Leu Gln Asn Gly Arg Lys Ser
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act gaa ttt cca aga aaa ata cgt gaa cag gag cca gca cgt cgt gtc   568
Thr Glu Phe Pro Arg Lys Ile Arg Glu Gln Glu Pro Ala Arg Arg Val
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aag gcc tat tca aaa atc act gaa gga aaa gtt tca gga aat cct cag   664
Lys Ala Tyr Ser Lys Ile Thr Glu Gly Lys Val Ser Gly Asn Pro Gln
                145                 150                 155

gta cat atc aag aat gtc aaa gaa gac agt acc gca gat gac tca aaa   712
Val His Ile Lys Asn Val Lys Glu Asp Ser Thr Ala Asp Asp Ser Lys
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gac agt gtt gct cag gga aca act aat gtt cat tcc tca gaa cat gct   760
Asp Ser Val Ala Gln Gly Thr Thr Asn Val His Ser Ser Glu His Ala
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gga cgt aat ggc aga aat gca gct gat ccc att tct ggg gat ttt aaa   808
Gly Arg Asn Gly Arg Asn Ala Ala Asp Pro Ile Ser Gly Asp Phe Lys
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gaa att tcc agc gtt aaa tta gtg agc cgt tat gga gaa ttg aag tct   856
Glu Ile Ser Ser Val Lys Leu Val Ser Arg Tyr Gly Glu Leu Lys Ser
205                 210                 215                 220

gtt ccc act aca caa tgt ctt gac aat agc aaa aaa aat gaa tct ccc   904
Val Pro Thr Thr Gln Cys Leu Asp Asn Ser Lys Lys Asn Glu Ser Pro
                225                 230                 235

ttt tgg aag ctt tat gag tca gtg aag aaa gag ttg gat gta aaa tca   952
Phe Trp Lys Leu Tyr Glu Ser Val Lys Lys Glu Leu Asp Val Lys Ser
            240                 245                 250

caa aaa gaa aat gtc cta cag tat tgt aga aaa tct gga tta caa act  1000
Gln Lys Glu Asn Val Leu Gln Tyr Cys Arg Lys Ser Gly Leu Gln Thr
        255                 260                 265

gat tac gca aca gag aaa gaa agt gct gat ggt tta cag ggg gag acc  1048
Asp Tyr Ala Thr Glu Lys Glu Ser Ala Asp Gly Leu Gln Gly Glu Thr
    270                 275                 280

caa ctg ttg gtc tcg cgt aag tca aga cca aaa tct ggt ggg agc ggc  1096
Gln Leu Leu Val Ser Arg Lys Ser Arg Pro Lys Ser Gly Gly Ser Gly
285                 290                 295                 300

cac gct gtg gca gag cct gct tca cct gaa caa gag ctt gac cag aac  1144
His Ala Val Ala Glu Pro Ala Ser Pro Glu Gln Glu Leu Asp Gln Asn
                305                 310                 315

aag ggg aag gga aga gac gtg gag tct gtt cag act ccc agc aag gct  1192
Lys Gly Lys Gly Arg Asp Val Glu Ser Val Gln Thr Pro Ser Lys Ala
            320                 325                 330

gtg ggc gcc agc ttt cct ctc tat gag ccg gct aaa atg aag acc cct  1240
Val Gly Ala Ser Phe Pro Leu Tyr Glu Pro Ala Lys Met Lys Thr Pro
        335                 340                 345

gta caa tat tca cag caa caa aat tct cca caa aaa cat aag aac aaa  1288
Val Gln Tyr Ser Gln Gln Gln Asn Ser Pro Gln Lys His Lys Asn Lys
    350                 355                 360

gac ctg tat act act ggt aga aga gaa tct gtg aat ctg ggt aaa agt  1336
Asp Leu Tyr Thr Thr Gly Arg Arg Glu Ser Val Asn Leu Gly Lys Ser
365                 370                 375                 380

gaa ggc ttc aag gct ggt gat aaa act ctt act ccc agg aag ctt tca  1384
Glu Gly Phe Lys Ala Gly Asp Lys Thr Leu Thr Pro Arg Lys Leu Ser
                385                 390                 395
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act aga aat cga aca cca gct aaa gtt gaa gat gca gct gac tct gcc   1432
Thr Arg Asn Arg Thr Pro Ala Lys Val Glu Asp Ala Ala Asp Ser Ala
            400                 405                 410

act aag cca gaa aat ctc tct tcc aaa acc aga gga agt att cct aca   1480
Thr Lys Pro Glu Asn Leu Ser Ser Lys Thr Arg Gly Ser Ile Pro Thr
        415                 420                 425

gat gtg gaa gtt ctg cct acg gaa act gaa att cac aat gag cca ttt   1528
Asp Val Glu Val Leu Pro Thr Glu Thr Glu Ile His Asn Glu Pro Phe
    430                 435                 440

tta act ctg tgg ctc act caa gtt gag agg aag atc caa aag gat tcc   1576
Leu Thr Leu Trp Leu Thr Gln Val Glu Arg Lys Ile Gln Lys Asp Ser
445                 450                 455                 460

ctc agc aag cct gag aaa ttg ggc act aca gct gga cag atg tgc tct   1624
Leu Ser Lys Pro Glu Lys Leu Gly Thr Thr Ala Gly Gln Met Cys Ser
                465                 470                 475

ggg tta cct ggt ctt agt tca gtt gat atc aac aac ttt ggt gat tcc   1672
Gly Leu Pro Gly Leu Ser Ser Val Asp Ile Asn Asn Phe Gly Asp Ser
            480                 485                 490

att aat gag agt gag gga ata cct ttg aaa aga agg cgt gtg tcc ttt   1720
Ile Asn Glu Ser Glu Gly Ile Pro Leu Lys Arg Arg Arg Val Ser Phe
        495                 500                 505

ggt ggg cac cta aga cct gaa cta ttt gat gaa aac ttg cct cct aat   1768
Gly Gly His Leu Arg Pro Glu Leu Phe Asp Glu Asn Leu Pro Pro Asn
    510                 515                 520

acg cct ctc aaa agg gga gaa gcc cca acc aaa aga aag tct ctg gta   1816
Thr Pro Leu Lys Arg Gly Glu Ala Pro Thr Lys Arg Lys Ser Leu Val
525                 530                 535                 540

atg cac act cca cct gtc ctg aag aaa atc atc aag gaa cag cct caa   1864
Met His Thr Pro Pro Val Leu Lys Lys Ile Ile Lys Glu Gln Pro Gln
                545                 550                 555

cca tca gga aaa caa gag tca ggt tca gaa atc cat gtg gaa gtg aag   1912
Pro Ser Gly Lys Gln Glu Ser Gly Ser Glu Ile His Val Glu Val Lys
            560                 565                 570

gca caa agc ttg gtt ata agc cct cca gct cct agt cct agg aaa act   1960
Ala Gln Ser Leu Val Ile Ser Pro Pro Ala Pro Ser Pro Arg Lys Thr
        575                 580                 585

cca gtt gcc agt gat caa cgc cgt agg tcc tgc aaa aca gcc cct gct   2008
Pro Val Ala Ser Asp Gln Arg Arg Arg Ser Cys Lys Thr Ala Pro Ala
    590                 595                 600

tcc agc agc aaa tct cag aca gag gtt cct aag aga gga gga gaa aga   2056
Ser Ser Ser Lys Ser Gln Thr Glu Val Pro Lys Arg Gly Gly Glu Arg
605                 610                 615                 620

gtg gca acc tgc ctt caa aag aga gtg tct atc agc cga agt caa cat   2104
Val Ala Thr Cys Leu Gln Lys Arg Val Ser Ile Ser Arg Ser Gln His
                625                 630                 635

gat att tta cag atg ata tgt tcc aaa aga aga agt ggt gct tcg gaa   2152
Asp Ile Leu Gln Met Ile Cys Ser Lys Arg Arg Ser Gly Ala Ser Glu
            640                 645                 650

gca aat ctg att gtt gca aaa tca tgg gca gat gta gta aaa ctt ggt   2200
Ala Asn Leu Ile Val Ala Lys Ser Trp Ala Asp Val Val Lys Leu Gly
        655                 660                 665
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gca aaa caa aca caa act aaa gtc ata aaa cat ggt cct caa agg tca   2248
Ala Lys Gln Thr Gln Thr Lys Val Ile Lys His Gly Pro Gln Arg Ser
    670                 675                 680

atg aac aaa agg caa aga aga cct gct act cca aag aag cct gtg ggc   2296
Met Asn Lys Arg Gln Arg Arg Pro Ala Thr Pro Lys Lys Pro Val Gly
685                 690                 695                 700

gaa gtt cac agt caa ttt agt aca ggc cac gca aac tct cct tgt acc   2344
Glu Val His Ser Gln Phe Ser Thr Gly His Ala Asn Ser Pro Cys Thr
                705                 710                 715

ata ata ata ggg aaa gct cat act gaa aaa gta cat gtg cct gct cga   2392
Ile Ile Ile Gly Lys Ala His Thr Glu Lys Val His Val Pro Ala Arg
            720                 725                 730

ccc tac aga gtg ctc aac aac ttc att tcc aac caa aaa atg gac ttt   2440
Pro Tyr Arg Val Leu Asn Asn Phe Ile Ser Asn Gln Lys Met Asp Phe
        735                 740                 745

aag gaa gat ctt tca gga ata gct gaa atg ttc aag acc cca gtg aag   2488
Lys Glu Asp Leu Ser Gly Ile Ala Glu Met Phe Lys Thr Pro Val Lys
    750                 755                 760

gag caa ccg cag ttg aca agc aca tgt cac atc gct att tca aat tca   2536
Glu Gln Pro Gln Leu Thr Ser Thr Cys His Ile Ala Ile Ser Asn Ser
765                 770                 775                 780

gag aat ttg ctt gga aaa cag ttt caa gga act gat tca gga gaa gaa   2584
Glu Asn Leu Leu Gly Lys Gln Phe Gln Gly Thr Asp Ser Gly Glu Glu
                785                 790                 795

cct ctg ctc ccc acc tca gag agt ttt gga gga aat gtg ttc ttc agt   2632
Pro Leu Leu Pro Thr Ser Glu Ser Phe Gly Gly Asn Val Phe Phe Ser
            800                 805                 810

gca cag aat gca gca aaa cag cca tct gat aaa tgc tct gca agc cct   2680
Ala Gln Asn Ala Ala Lys Gln Pro Ser Asp Lys Cys Ser Ala Ser Pro
        815                 820                 825

ccc tta aga cgg cag tgt att aga gaa aat gga aac gta gca aaa acg   2728
Pro Leu Arg Arg Gln Cys Ile Arg Glu Asn Gly Asn Val Ala Lys Thr
    830                 835                 840

ccc agg aac acc tac aaa atg act tct ctg gag aca aaa act tca gat   2776
Pro Arg Asn Thr Tyr Lys Met Thr Ser Leu Glu Thr Lys Thr Ser Asp
845                 850                 855                 860

act gag aca gag cct tca aaa aca gta tcc act gta aac agg tca gga   2824
Thr Glu Thr Glu Pro Ser Lys Thr Val Ser Thr Val Asn Arg Ser Gly
                865                 870                 875

agg tct aca gag ttc agg aat ata cag aag cta cct gtg gaa agt aag   2872
Arg Ser Thr Glu Phe Arg Asn Ile Gln Lys Leu Pro Val Glu Ser Lys
            880                 885                 890

agt gaa gaa aca aat aca gaa att gtt gag tgc atc cta aaa aga ggt   2920
Ser Glu Glu Thr Asn Thr Glu Ile Val Glu Cys Ile Leu Lys Arg Gly
        895                 900                 905

cag aag gca aca cta cta caa caa agg aga gaa gga gag atg aag gaa   2968
Gln Lys Ala Thr Leu Leu Gln Gln Arg Arg Glu Gly Glu Met Lys Glu
    910                 915                 920

ata gaa aga cct ttt gag aca tat aag gaa aat att gaa tta aaa gaa   3016
Ile Glu Arg Pro Phe Glu Thr Tyr Lys Glu Asn Ile Glu Leu Lys Glu
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aac gat gaa aag atg aaa gca atg aag aga tca aga act tgg ggg cag   3064
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aaa tgt gca cca atg tct gac ctg aca gac ctc aag agc ttg cct gat   3112
Lys Cys Ala Pro Met Ser Asp Leu Thr Asp Leu Lys Ser Leu Pro Asp
            960                 965                 970

aca gaa ctc atg aaa gac acg gca cgt ggc cag aat ctc ctc caa acc   3160
Thr Glu Leu Met Lys Asp Thr Ala Arg Gly Gln Asn Leu Leu Gln Thr
        975                 980                 985

caa gat cat gcc aag gca cca aag agt gag aaa ggc aaa atc act aaa   3208
Gln Asp His Ala Lys Ala Pro Lys Ser Glu Lys Gly Lys Ile Thr Lys
    990                 995                1000

atg ccc tgc cag tca tta caa cca gaa cca ata aac acc cca aca cac   3256
Met Pro Cys Gln Ser Leu Gln Pro Glu Pro Ile Asn Thr Pro Thr His
1005                1010                1015                1020

aca aaa caa cag ttg aag gca tcc ctg ggg aaa gta ggt gtg aaa gaa   3304
Thr Lys Gln Gln Leu Lys Ala Ser Leu Gly Lys Val Gly Val Lys Glu
                1025                1030                1035

gag ctc cta gca gtc ggc aag ttc aca cgg acg tca ggg gag acc acg   3352
Glu Leu Leu Ala Val Gly Lys Phe Thr Arg Thr Ser Gly Glu Thr Thr
            1040                1045                1050

cac acg cac aga gag cca gca gga gat ggc aag agc atc aga acg ttt   3400
His Thr His Arg Glu Pro Ala Gly Asp Gly Lys Ser Ile Arg Thr Phe
        1055                1060                1065

aag gag tct cca aag cag atc ctg gac cca gca gcc cgt gta act gga   3448
Lys Glu Ser Pro Lys Gln Ile Leu Asp Pro Ala Ala Arg Val Thr Gly
    1070                1075                1080

atg aag aag tgg cca aga acg cct aag gaa gag gcc cag tca cta gaa   3496
Met Lys Lys Trp Pro Arg Thr Pro Lys Glu Glu Ala Gln Ser Leu Glu
1085                1090                1095                1100

gac ctg gct ggc ttc aaa gag ctc ttc cag aca cca ggt ccc tct gag   3544
Asp Leu Ala Gly Phe Lys Glu Leu Phe Gln Thr Pro Gly Pro Ser Glu
                1105                1110                1115

gaa tca atg act gat gag aaa act acc aaa ata gcc tgc aaa tct cca   3592
Glu Ser Met Thr Asp Glu Lys Thr Thr Lys Ile Ala Cys Lys Ser Pro
            1120                1125                1130

cca cca gaa tca gtg gac act cca aca agc aca aag caa tgg cct aag   3640
Pro Pro Glu Ser Val Asp Thr Pro Thr Ser Thr Lys Gln Trp Pro Lys
        1135                1140                1145

aga agt ctc agg aaa gca gat gta gag gaa gaa ttc tta gca ctc agg   3688
Arg Ser Leu Arg Lys Ala Asp Val Glu Glu Glu Phe Leu Ala Leu Arg
    1150                1155                1160

aaa cta aca cca tca gca ggg aaa gcc atg ctt acg ccc aaa cca gca   3736
Lys Leu Thr Pro Ser Ala Gly Lys Ala Met Leu Thr Pro Lys Pro Ala
1165                1170                1175                1180

gga ggt gat gag aaa gac att aaa gca ttt atg gga act cca gtg cag   3784
Gly Gly Asp Glu Lys Asp Ile Lys Ala Phe Met Gly Thr Pro Val Gln
                1185                1190                1195

aaa ctg gac ctg gca gga act tta cct ggc agc aaa aga cag cta cag   3832
Lys Leu Asp Leu Ala Gly Thr Leu Pro Gly Ser Lys Arg Gln Leu Gln
            1200                1205                1210
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act cct aag gaa aag gcc cag gct cta gaa gac ctg gct ggc ttt aaa   3880
Thr Pro Lys Glu Lys Ala Gln Ala Leu Glu Asp Leu Ala Gly Phe Lys
       1215                1220                1225

gag ctc ttc cag act cct ggt cac acc gag gaa tta gtg gct gct ggt   3928
Glu Leu Phe Gln Thr Pro Gly His Thr Glu Glu Leu Val Ala Ala Gly
   1230                1235                1240

aaa acc act aaa ata ccc tgc gac tct cca cag tca gac cca gtg gac   3976
Lys Thr Thr Lys Ile Pro Cys Asp Ser Pro Gln Ser Asp Pro Val Asp
1245                1250                1255                1260

acc cca aca agc aca aag caa cga ccc aag aga agt atc agg aaa gca   4024
Thr Pro Thr Ser Thr Lys Gln Arg Pro Lys Arg Ser Ile Arg Lys Ala
               1265                1270                1275

gat gta gag gga gaa ctc tta gcg tgc agg aat cta atg cca tca gca   4072
Asp Val Glu Gly Glu Leu Leu Ala Cys Arg Asn Leu Met Pro Ser Ala
           1280                1285                1290

ggc aaa gcc atg cac acg cct aaa cca tca gta ggt gaa gag aaa gac   4120
Gly Lys Ala Met His Thr Pro Lys Pro Ser Val Gly Glu Glu Lys Asp
       1295                1300                1305

atc atc ata ttt gtg gga act cca gtg cag aaa ctg gac ctg aca gag   4168
Ile Ile Ile Phe Val Gly Thr Pro Val Gln Lys Leu Asp Leu Thr Glu
   1310                1315                1320

aac tta acc ggc agc aag aga cgg cca caa act cct aag gaa gag gcc   4216
Asn Leu Thr Gly Ser Lys Arg Arg Pro Gln Thr Pro Lys Glu Glu Ala
1325                1330                1335                1340

cag gct ctg gaa gac ctg act ggc ttt aaa gag ctc ttc cag acc cct   4264
Gln Ala Leu Glu Asp Leu Thr Gly Phe Lys Glu Leu Phe Gln Thr Pro
               1345                1350                1355

ggt cat act gaa gaa gca gtg gct gct ggc aaa act act aaa atg ccc   4312
Gly His Thr Glu Glu Ala Val Ala Ala Gly Lys Thr Thr Lys Met Pro
           1360                1365                1370

tgc gaa tct tct cca cca gaa tca gca gac acc cca aca agc aca aga   4360
Cys Glu Ser Ser Pro Pro Glu Ser Ala Asp Thr Pro Thr Ser Thr Arg
       1375                1380                1385

agg cag ccc aag aca cct ttg gag aaa agg gac gta cag aag gag ctc   4408
Arg Gln Pro Lys Thr Pro Leu Glu Lys Arg Asp Val Gln Lys Glu Leu
   1390                1395                1400

tca gcc ctg aag aag ctc aca cag aca tca ggg gaa acc aca cac aca   4456
Ser Ala Leu Lys Lys Leu Thr Gln Thr Ser Gly Glu Thr Thr His Thr
1405                1410                1415                1420

gat aaa gta cca gga ggt gag gat aaa agc atc aac gcg ttt agg gaa   4504
Asp Lys Val Pro Gly Gly Glu Asp Lys Ser Ile Asn Ala Phe Arg Glu
               1425                1430                1435

act gca aaa cag aaa ctg gac cca gca gca agt gta act ggt agc aag   4552
Thr Ala Lys Gln Lys Leu Asp Pro Ala Ala Ser Val Thr Gly Ser Lys
           1440                1445                1450

agg cac cca aaa act aag gaa aag gcc caa ccc cta gaa gac ctg gct   4600
Arg His Pro Lys Thr Lys Glu Lys Ala Gln Pro Leu Glu Asp Leu Ala
       1455                1460                1465

ggc tgg aaa gag ctc ttc cag aca cca gta tgc act gac aag ccc acg   4648
Gly Trp Lys Glu Leu Phe Gln Thr Pro Val Cys Thr Asp Lys Pro Thr
   1470                1475                1480
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Thr His Glu Lys Thr Thr Lys Ile Ala Cys Arg Ser Gln Pro Asp Pro
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gtg gac aca cca aca agc tcc aag cca cag tcc aag aga agt ctc agg   4744
Val Asp Thr Pro Thr Ser Ser Lys Pro Gln Ser Lys Arg Ser Leu Arg
                1505                1510                1515

aaa gtg gac gta gaa gaa gaa ttc ttc gca ctc agg aaa cga aca cca   4792
Lys Val Asp Val Glu Glu Glu Phe Phe Ala Leu Arg Lys Arg Thr Pro
            1520                1525                1530

tca gca ggc aaa gcc atg cac aca ccc aaa cca gca gta agt ggt gag   4840
Ser Ala Gly Lys Ala Met His Thr Pro Lys Pro Ala Val Ser Gly Glu
        1535                1540                1545

aaa aac atc tac gca ttt atg gga act cca gtg cag aaa ctg gac ctg   4888
Lys Asn Ile Tyr Ala Phe Met Gly Thr Pro Val Gln Lys Leu Asp Leu
    1550                1555                1560

aca gag aac tta act ggc agc aag aga cgg cta caa act cct aag gaa   4936
Thr Glu Asn Leu Thr Gly Ser Lys Arg Arg Leu Gln Thr Pro Lys Glu
1565                1570                1575                1580

aag gcc cag gct cta gaa gac ctg gct ggc ttt aaa gag ctc ttc cag   4984
Lys Ala Gln Ala Leu Glu Asp Leu Ala Gly Phe Lys Glu Leu Phe Gln
                1585                1590                1595

aca cga ggt cac act gag gaa tca atg act aac gat aaa act gcc aaa   5032
Thr Arg Gly His Thr Glu Glu Ser Met Thr Asn Asp Lys Thr Ala Lys
            1600                1605                1610

gta gcc tgc aaa tct tca caa cca gac cta gac aaa aac cca gca agc   5080
Val Ala Cys Lys Ser Ser Gln Pro Asp Leu Asp Lys Asn Pro Ala Ser
        1615                1620                1625

tcc aag cga cgg ctc aag aca tcc ctg ggg aaa gtg ggc gtg aaa gaa   5128
Ser Lys Arg Arg Leu Lys Thr Ser Leu Gly Lys Val Gly Val Lys Glu
    1630                1635                1640

gag ctc cta gca gtt ggc aag ctc aca cag aca tca gga gag act aca   5176
Glu Leu Leu Ala Val Gly Lys Leu Thr Gln Thr Ser Gly Glu Thr Thr
1645                1650                1655                1660

cac aca cac aca gag cca aca gga gat ggt aag agc atg aaa gca ttt   5224
His Thr His Thr Glu Pro Thr Gly Asp Gly Lys Ser Met Lys Ala Phe
                1665                1670                1675

atg gag tct cca aag cag atc tta gac tca gca gca agt cta act ggc   5272
Met Glu Ser Pro Lys Gln Ile Leu Asp Ser Ala Ala Ser Leu Thr Gly
            1680                1685                1690

agc aag agg cag ctg aga act cct aag gga aag tct gaa gtc cct gaa   5320
Ser Lys Arg Gln Leu Arg Thr Pro Lys Gly Lys Ser Glu Val Pro Glu
        1695                1700                1705

gac ctg gcc ggc ttc atc gag ctc ttc cag aca cca agt cac act aag   5368
Asp Leu Ala Gly Phe Ile Glu Leu Phe Gln Thr Pro Ser His Thr Lys
    1710                1715                1720

gaa tca atg act aat gaa aaa act acc aaa gta tcc tac aga gct tca   5416
Glu Ser Met Thr Asn Glu Lys Thr Thr Lys Val Ser Tyr Arg Ala Ser
1725                1730                1735                1740

cag cca gac cta gtg gac acc cca aca agc tcc aag cca cag ccc aag   5464
Gln Pro Asp Leu Val Asp Thr Pro Thr Ser Ser Lys Pro Gln Pro Lys
                1745                1750                1755
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aga agt ctc agg aaa gca gac act gaa gaa gaa ttt tta gca ttt agg   5512
Arg Ser Leu Arg Lys Ala Asp Thr Glu Glu Glu Phe Leu Ala Phe Arg
          1760                1765                1770

aaa caa acg cca tca gca ggc aaa gcc atg cac aca ccc aaa cca gca   5560
Lys Gln Thr Pro Ser Ala Gly Lys Ala Met His Thr Pro Lys Pro Ala
      1775                1780                1785

gta ggt gaa gag aaa gac atc aac acg ttt ttg gga act cca gtg cag   5608
Val Gly Glu Glu Lys Asp Ile Asn Thr Phe Leu Gly Thr Pro Val Gln
   1790                1795                1800

aaa ctg gac cag cca gga aat tta cct ggc agc aat aga cgg cta caa   5656
Lys Leu Asp Gln Pro Gly Asn Leu Pro Gly Ser Asn Arg Arg Leu Gln
1805                1810                1815                1820

act cgt aag gaa aag gcc cag gct cta gaa gaa ctg act ggc ttc aga   5704
Thr Arg Lys Glu Lys Ala Gln Ala Leu Glu Glu Leu Thr Gly Phe Arg
               1825                1830                1835

gag ctt ttc cag aca cca tgc act gat aac ccc aca gct gat gag aaa   5752
Glu Leu Phe Gln Thr Pro Cys Thr Asp Asn Pro Thr Ala Asp Glu Lys
          1840                1845                1850

act acc aaa aaa ata ctc tgc aaa tct ccg caa tca gac cca gcg gac   5800
Thr Thr Lys Lys Ile Leu Cys Lys Ser Pro Gln Ser Asp Pro Ala Asp
      1855                1860                1865

acc cca aca aac aca aag caa cgg ccc aag aga agc ctc aag aaa gca   5848
Thr Pro Thr Asn Thr Lys Gln Arg Pro Lys Arg Ser Leu Lys Lys Ala
   1870                1875                1880

gac gta gag gaa gaa ttt tta gca ttc agg aaa cta aca cca tca gca   5896
Asp Val Glu Glu Glu Phe Leu Ala Phe Arg Lys Leu Thr Pro Ser Ala
1885                1890                1895                1900

ggc aaa gcc atg cac acg cct aaa gca gca gta ggt gaa gag aaa gac   5944
Gly Lys Ala Met His Thr Pro Lys Ala Ala Val Gly Glu Glu Lys Asp
               1905                1910                1915

atc aac aca ttt gtg ggg act cca gtg gag aaa ctg gac ctg cta gga   5992
Ile Asn Thr Phe Val Gly Thr Pro Val Glu Lys Leu Asp Leu Leu Gly
          1920                1925                1930

aat tta cct ggc agc aag aga cgg cca caa act cct aaa gaa aag gcc   6040
Asn Leu Pro Gly Ser Lys Arg Arg Pro Gln Thr Pro Lys Glu Lys Ala
      1935                1940                1945

aag gct cta gaa gat ctg gct ggc ttc aaa gag ctc ttc cag aca cca   6088
Lys Ala Leu Glu Asp Leu Ala Gly Phe Lys Glu Leu Phe Gln Thr Pro
   1950                1955                1960

ggt cac act gag gaa tca atg acc gat gac aaa atc aca gaa gta tcc   6136
Gly His Thr Glu Glu Ser Met Thr Asp Asp Lys Ile Thr Glu Val Ser
1965                1970                1975                1980

tgc aaa tct cca caa cca gac cca gtc aaa acc cca aca agc tcc aag   6184
Cys Lys Ser Pro Gln Pro Asp Pro Val Lys Thr Pro Thr Ser Ser Lys
               1985                1990                1995

caa cga ctc aag ata tcc ttg ggg aaa gta ggt gtg aaa gaa gag gtc   6232
Gln Arg Leu Lys Ile Ser Leu Gly Lys Val Gly Val Lys Glu Glu Val
          2000                2005                2010

cta cca gtc ggc aag ctc aca cag acg tca ggg aag acc aca cag aca   6280
Leu Pro Val Gly Lys Leu Thr Gln Thr Ser Gly Lys Thr Thr Gln Thr
      2015                2020                2025
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cac aga gag aca gca gga gat gga aag agc atc aaa gcg ttt aag gaa   6328
His Arg Glu Thr Ala Gly Asp Gly Lys Ser Ile Lys Ala Phe Lys Glu
   2030                2035                2040

tct gca aag cag atg ctg gac cca gca aac tat gga act ggg atg gag   6376
Ser Ala Lys Gln Met Leu Asp Pro Ala Asn Tyr Gly Thr Gly Met Glu
2045                2050                2055                2060

agg tgg cca aga aca cct aag gaa gag gcc caa tca cta gaa gac ctg   6424
Arg Trp Pro Arg Thr Pro Lys Glu Glu Ala Gln Ser Leu Glu Asp Leu
                2065                2070                2075

gcc ggc ttc aaa gag ctc ttc cag aca cca gac cac act gag gaa tca   6472
Ala Gly Phe Lys Glu Leu Phe Gln Thr Pro Asp His Thr Glu Glu Ser
          2080                2085                2090

aca act gat gac aaa act acc aaa ata gcc tgc aaa tct cca cca cca   6520
Thr Thr Asp Asp Lys Thr Thr Lys Ile Ala Cys Lys Ser Pro Pro Pro
       2095                2100                2105

gaa tca atg gac act cca aca agc aca agg agg cgg ccc aaa aca cct   6568
Glu Ser Met Asp Thr Pro Thr Ser Thr Arg Arg Arg Pro Lys Thr Pro
   2110                2115                2120

ttg ggg aaa agg gat ata gtg gaa gag ctc tca gcc ctg aag cag ctc   6616
Leu Gly Lys Arg Asp Ile Val Glu Glu Leu Ser Ala Leu Lys Gln Leu
2125                2130                2135                2140

aca cag acc aca cac aca gac aaa gta cca gga gat gag gat aaa ggc   6664
Thr Gln Thr Thr His Thr Asp Lys Val Pro Gly Asp Glu Asp Lys Gly
                2145                2150                2155

atc aac gtg ttc agg gaa act gca aaa cag aaa ctg gac cca gca gca   6712
Ile Asn Val Phe Arg Glu Thr Ala Lys Gln Lys Leu Asp Pro Ala Ala
          2160                2165                2170

agt gta act ggt agc aag agg cag cca aga act cct aag gga aaa gcc   6760
Ser Val Thr Gly Ser Lys Arg Gln Pro Arg Thr Pro Lys Gly Lys Ala
       2175                2180                2185

caa ccc cta gaa gac ttg gct ggc ttg aaa gag ctc ttc cag aca cca   6808
Gln Pro Leu Glu Asp Leu Ala Gly Leu Lys Glu Leu Phe Gln Thr Pro
   2190                2195                2200

gta tgc act gac aag ccc acg act cac gag aaa act acc aaa ata gcc   6856
Val Cys Thr Asp Lys Pro Thr Thr His Glu Lys Thr Thr Lys Ile Ala
2205                2210                2215                2220

tgc aga tct cca caa cca gac cca gtg ggt acc cca aca atc ttc aag   6904
Cys Arg Ser Pro Gln Pro Asp Pro Val Gly Thr Pro Thr Ile Phe Lys
                2225                2230                2235

cca cag tcc aag aga agt ctc agg aaa gca gac gta gag gaa gaa tcc   6952
Pro Gln Ser Lys Arg Ser Leu Arg Lys Ala Asp Val Glu Glu Glu Ser
          2240                2245                2250

tta gca ctc agg aaa cga aca cca tca gta ggg aaa gct atg gac aca   7000
Leu Ala Leu Arg Lys Arg Thr Pro Ser Val Gly Lys Ala Met Asp Thr
       2255                2260                2265

ccc aaa cca gca gga ggt gat gag aaa gac atg aaa gca ttt atg gga   7048
Pro Lys Pro Ala Gly Gly Asp Glu Lys Asp Met Lys Ala Phe Met Gly
   2270                2275                2280

act cca gtg cag aaa ttg gac ctg cca gga aat tta cct ggc agc aaa   7096
Thr Pro Val Gln Lys Leu Asp Leu Pro Gly Asn Leu Pro Gly Ser Lys
2285                2290                2295                2300
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aga tgg cca caa act cct aag gaa aag gcc cag gct cta gaa gac ctg   7144
Arg Trp Pro Gln Thr Pro Lys Glu Lys Ala Gln Ala Leu Glu Asp Leu
                2305                2310                2315

gct ggc ttc aaa gag ctc ttc cag aca cca ggc act gac aag ccc acg   7192
Ala Gly Phe Lys Glu Leu Phe Gln Thr Pro Gly Thr Asp Lys Pro Thr
            2320                2325                2330

act gat gag aaa act acc aaa ata gcc tgc aaa tct cca caa cca gac   7240
Thr Asp Glu Lys Thr Thr Lys Ile Ala Cys Lys Ser Pro Gln Pro Asp
        2335                2340                2345

cca gtg gac acc cca gca agc aca aag caa cgg ccc aag aga aac ctc   7288
Pro Val Asp Thr Pro Ala Ser Thr Lys Gln Arg Pro Lys Arg Asn Leu
    2350                2355                2360

agg aaa gca gac gta gag gaa gaa ttt tta gca ctc agg aaa cga aca   7336
Arg Lys Ala Asp Val Glu Glu Glu Phe Leu Ala Leu Arg Lys Arg Thr
2365                2370                2375                2380

cca tca gca ggc aaa gcc atg gac acc cca aaa cca gca gta agt gat   7384
Pro Ser Ala Gly Lys Ala Met Asp Thr Pro Lys Pro Ala Val Ser Asp
                2385                2390                2395

gag aaa aat atc aac aca ttt gtg gaa act cca gtg cag aaa ctg gac   7432
Glu Lys Asn Ile Asn Thr Phe Val Glu Thr Pro Val Gln Lys Leu Asp
            2400                2405                2410

ctg cta gga aat tta cct ggc agc aag aga cag cca cag act cct aag   7480
Leu Leu Gly Asn Leu Pro Gly Ser Lys Arg Gln Pro Gln Thr Pro Lys
        2415                2420                2425

gaa aag gct gag gct cta gag gac ctg gtt ggc ttc aaa gaa ctc ttc   7528
Glu Lys Ala Glu Ala Leu Glu Asp Leu Val Gly Phe Lys Glu Leu Phe
    2430                2435                2440

cag aca cca ggt cac act gag gaa tca atg act gat gac aaa atc aca   7576
Gln Thr Pro Gly His Thr Glu Glu Ser Met Thr Asp Asp Lys Ile Thr
2445                2450                2455                2460

gaa gta tcc tgt aaa tct cca cag cca gag tca ttc aaa acc tca aga   7624
Glu Val Ser Cys Lys Ser Pro Gln Pro Glu Ser Phe Lys Thr Ser Arg
                2465                2470                2475

agc tcc aag caa agg ctc aag ata ccc ctg gtg aaa gtg gac atg aaa   7672
Ser Ser Lys Gln Arg Leu Lys Ile Pro Leu Val Lys Val Asp Met Lys
            2480                2485                2490

gaa gag ccc cta gca gtc agc aag ctc aca cgg aca tca ggg gag act   7720
Glu Glu Pro Leu Ala Val Ser Lys Leu Thr Arg Thr Ser Gly Glu Thr
        2495                2500                2505

acg caa aca cac aca gag cca aca gga gat agt aag agc atc aaa gcg   7768
Thr Gln Thr His Thr Glu Pro Thr Gly Asp Ser Lys Ser Ile Lys Ala
    2510                2515                2520

ttt aag gag tct cca aag cag atc ctg gac cca gca gca agt gta act   7816
Phe Lys Glu Ser Pro Lys Gln Ile Leu Asp Pro Ala Ala Ser Val Thr
2525                2530                2535                2540

ggt agc agg agg cag ctg aga act cgt aag gaa aag gcc cgt gct cta   7864
Gly Ser Arg Arg Gln Leu Arg Thr Arg Lys Glu Lys Ala Arg Ala Leu
                2545                2550                2555

gaa gac ctg gtt gac ttc aaa gag ctc ttc tca gca cca ggt cac act   7912
Glu Asp Leu Val Asp Phe Lys Glu Leu Phe Ser Ala Pro Gly His Thr
            2560                2565                2570
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gaa gag tca atg act att gac aaa aac aca aaa att ccc tgc aaa tct   7960
Glu Glu Ser Met Thr Ile Asp Lys Asn Thr Lys Ile Pro Cys Lys Ser
       2575                2580                2585

ccc cca cca gaa cta aca gac act gcc acg agc aca aag aga tgc ccc   8008
Pro Pro Pro Glu Leu Thr Asp Thr Ala Thr Ser Thr Lys Arg Cys Pro
   2590                2595                2600

aag aca cgt ccc agg aaa gaa gta aaa gag gag ctc tca gca gtt gag   8056
Lys Thr Arg Pro Arg Lys Glu Val Lys Glu Glu Leu Ser Ala Val Glu
2605                2610                2615                2620

agg ctc acg caa aca tca ggg caa agc aca cac aca cac aaa gaa cca   8104
Arg Leu Thr Gln Thr Ser Gly Gln Ser Thr His Thr His Lys Glu Pro
                2625                2630                2635

gca agc ggt gat gag ggc atc aaa gta ttg aag caa cgt gca aag aag   8152
Ala Ser Gly Asp Glu Gly Ile Lys Val Leu Lys Gln Arg Ala Lys Lys
           2640                2645                2650

aaa cca aac cca gta gaa gag gaa ccc agc agg aga agg cca aga gca   8200
Lys Pro Asn Pro Val Glu Glu Glu Pro Ser Arg Arg Arg Pro Arg Ala
       2655                2660                2665

cct aag gaa aag gcc caa ccc ctg gaa gac ctg gcc ggc ttc aca gag   8248
Pro Lys Glu Lys Ala Gln Pro Leu Glu Asp Leu Ala Gly Phe Thr Glu
   2670                2675                2680

ctc tct gaa aca tca ggt cac act cag gaa tca ctg act gct ggc aaa   8296
Leu Ser Glu Thr Ser Gly His Thr Gln Glu Ser Leu Thr Ala Gly Lys
2685                2690                2695                2700

gcc act aaa ata ccc tgc gaa tct ccc cca cta gaa gtg gta gac acc   8344
Ala Thr Lys Ile Pro Cys Glu Ser Pro Pro Leu Glu Val Val Asp Thr
                2705                2710                2715

aca gca agc aca aag agg cat ctc agg aca cgt gtg cag aag gta caa   8392
Thr Ala Ser Thr Lys Arg His Leu Arg Thr Arg Val Gln Lys Val Gln
           2720                2725                2730

gta aaa gaa gag cct tca gca gtc aag ttc aca caa aca tca ggg gaa   8440
Val Lys Glu Glu Pro Ser Ala Val Lys Phe Thr Gln Thr Ser Gly Glu
       2735                2740                2745

acc acg gat gca gac aaa gaa cca gca ggt gaa gat aaa ggc atc aaa   8488
Thr Thr Asp Ala Asp Lys Glu Pro Ala Gly Glu Asp Lys Gly Ile Lys
   2750                2755                2760

gca ttg aag gaa tct gca aaa cag aca ccg gct cca gca gca agt gta   8536
Ala Leu Lys Glu Ser Ala Lys Gln Thr Pro Ala Pro Ala Ala Ser Val
2765                2770                2775                2780

act ggc agc agg aga cgg cca aga gca ccc agg gaa agt gcc caa gcc   8584
Thr Gly Ser Arg Arg Arg Pro Arg Ala Pro Arg Glu Ser Ala Gln Ala
                2785                2790                2795

ata gaa gac cta gct ggc ttc aaa gac cca gca gca ggt cac act gaa   8632
Ile Glu Asp Leu Ala Gly Phe Lys Asp Pro Ala Ala Gly His Thr Glu
           2800                2805                2810

gaa tca atg act gat gac aaa acc act aaa ata ccc tgc aaa tca tca   8680
Glu Ser Met Thr Asp Asp Lys Thr Thr Lys Ile Pro Cys Lys Ser Ser
       2815                2820                2825

cca gaa cta gaa gac acc gca aca agc tca aag aga cgg ccc agg aca   8728
Pro Glu Leu Glu Asp Thr Ala Thr Ser Ser Lys Arg Arg Pro Arg Thr
   2830                2835                2840
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cgt gcc cag aaa gta gaa gtg aag gag gag ctg tta gca gtt ggc aag   8776
Arg Ala Gln Lys Val Glu Val Lys Glu Glu Leu Leu Ala Val Gly Lys
2845                2850                2855                2860

ctc aca caa acc tca ggg gag acc acg cac acc gac aaa gag ccg gta   8824
Leu Thr Gln Thr Ser Gly Glu Thr Thr His Thr Asp Lys Glu Pro Val
                2865                2870                2875

ggt gag ggc aaa ggc acg aaa gca ttt aag caa cct gca aag cgg aac   8872
Gly Glu Gly Lys Gly Thr Lys Ala Phe Lys Gln Pro Ala Lys Arg Asn
            2880                2885                2890

gtg gac gca gaa gat gta att ggc agc agg aga cag cca aga gca cct   8920
Val Asp Ala Glu Asp Val Ile Gly Ser Arg Arg Gln Pro Arg Ala Pro
        2895                2900                2905

aag gaa aag gcc caa ccc ctg gaa gac ctg gcc agc ttc caa gag ctc   8968
Lys Glu Lys Ala Gln Pro Leu Glu Asp Leu Ala Ser Phe Gln Glu Leu
    2910                2915                2920

tct caa aca cca ggc cac act gag gaa ctg gca aat ggt gct gct gat   9016
Ser Gln Thr Pro Gly His Thr Glu Glu Leu Ala Asn Gly Ala Ala Asp
2925                2930                2935                2940

agc ttt aca agc gct cca aag caa aca cct gac agt gga aaa cct cta   9064
Ser Phe Thr Ser Ala Pro Lys Gln Thr Pro Asp Ser Gly Lys Pro Leu
                2945                2950                2955

aaa ata tcc aga aga gtt ctt cgg gcc cct aaa gta gaa ccc gtg gga   9112
Lys Ile Ser Arg Arg Val Leu Arg Ala Pro Lys Val Glu Pro Val Gly
            2960                2965                2970

gac gtg gta agc acc aga gac cct gta aaa tca caa agc aaa agc aac   9160
Asp Val Val Ser Thr Arg Asp Pro Val Lys Ser Gln Ser Lys Ser Asn
        2975                2980                2985

act tcc ctg ccc cca ctg ccc ttc aag agg gga ggt ggc aaa gat gga   9208
Thr Ser Leu Pro Pro Leu Pro Phe Lys Arg Gly Gly Gly Lys Asp Gly
    2990                2995                3000

agc gtc acg gga acc aag agg ctg cgc tgc atg cca gca cca gag gaa   9256
Ser Val Thr Gly Thr Lys Arg Leu Arg Cys Met Pro Ala Pro Glu Glu
3005                3010                3015                3020

att gtg gag gag ctg cca gcc agc aag aag cag agg gtt gct ccc agg   9304
Ile Val Glu Glu Leu Pro Ala Ser Lys Lys Gln Arg Val Ala Pro Arg
                3025                3030                3035

gca aga ggc aaa tca tcc gaa ccc gtg gtc atc atg aag aga agt ttg   9352
Ala Arg Gly Lys Ser Ser Glu Pro Val Val Ile Met Lys Arg Ser Leu
            3040                3045                3050

agg act tct gca aaa aga att gaa cct gcg gaa gag ctg aac agc aac   9400
Arg Thr Ser Ala Lys Arg Ile Glu Pro Ala Glu Glu Leu Asn Ser Asn
        3055                3060                3065

gac atg aaa acc aac aaa gag gaa cac aaa tta caa gac tcg gtc cct   9448
Asp Met Lys Thr Asn Lys Glu Glu His Lys Leu Gln Asp Ser Val Pro
    3070                3075                3080

gaa aat aag gga ata tcc ctg cgc tcc aga cgc caa gat aag act gag   9496
Glu Asn Lys Gly Ile Ser Leu Arg Ser Arg Arg Gln Asp Lys Thr Glu
3085                3090                3095                3100

gca gaa cag caa ata act gag gtc ttt gta tta gca gaa aga ata gaa   9544
Ala Glu Gln Gln Ile Thr Glu Val Phe Val Leu Ala Glu Arg Ile Glu
                3105                3110                3115
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ata aac aga aat gaa aag aag ccc atg aag acc tcc cca gag atg gac   9592
Ile Asn Arg Asn Glu Lys Lys Pro Met Lys Thr Ser Pro Glu Met Asp
          3120                3125                3130

att cag aat cca gat gat gga gcc cgg aaa ccc ata cct aga gac aaa   9640
Ile Gln Asn Pro Asp Asp Gly Ala Arg Lys Pro Ile Pro Arg Asp Lys
      3135                3140                3145

gtc act gag aac aaa agg tgc ttg agg tct gct aga cag aat gag agc   9688
Val Thr Glu Asn Lys Arg Cys Leu Arg Ser Ala Arg Gln Asn Glu Ser
  3150                3155                3160

tcc cag cct aag gtg gca gag gag agc gga ggg cag aag agt gcg aag   9736
Ser Gln Pro Lys Val Ala Glu Glu Ser Gly Gly Gln Lys Ser Ala Lys
3165                3170                3175                3180

gtt ctc atg cag aat cag aaa ggg aaa gga gaa gca gga aat tca gac   9784
Val Leu Met Gln Asn Gln Lys Gly Lys Gly Glu Ala Gly Asn Ser Asp
              3185                3190                3195

tcc atg tgc ctg aga tca aga aag aca aaa agc cag cct gca gca agc   9832
Ser Met Cys Leu Arg Ser Arg Lys Thr Lys Ser Gln Pro Ala Ala Ser
          3200                3205                3210

act ttg gag agc aaa tct gtg cag aga gta acg cgg agt gtc aag agg   9880
Thr Leu Glu Ser Lys Ser Val Gln Arg Val Thr Arg Ser Val Lys Arg
      3215                3220                3225

tgt gca gaa aat cca aag aag gct gag gac aat gtg tgt gtc aag aaa   9928
Cys Ala Glu Asn Pro Lys Lys Ala Glu Asp Asn Val Cys Val Lys Lys
  3230                3235                3240

ata aca acc aga agt cat agg gac agt gaa gat att tgacagaaaa       9974
Ile Thr Thr Arg Ser His Arg Asp Ser Glu Asp Ile
3245                3250                3255

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  1               5                  10                  15

Gly Pro His Phe Pro Leu Ser Leu Ser Thr Cys Leu Phe Gly Arg Gly
             20                  25                  30

Ile Glu Cys Asp Ile Arg Ile Gln Leu Pro Val Val Ser Lys Gln His
         35                  40                  45
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Cys Lys Val Glu Ile His Glu Gln Glu Ala Ile Leu His Asn Phe Ser
     50                  55                  60

Ser Thr Asn Pro Thr Gln Val Asn Gly Ser Val Ile Asp Glu Pro Val
 65                  70                  75                  80

Arg Leu Lys His Gly Asp Val Ile Thr Ile Ile Asp Arg Ser Phe Arg
                 85                  90                  95

Tyr Glu Asn Glu Ser Leu Gln Asn Gly Arg Lys Ser Thr Glu Phe Pro
            100                 105                 110

Arg Lys Ile Arg Glu Gln Glu Pro Ala Arg Arg Val Ser Arg Ser Ser
        115                 120                 125

Phe Ser Ser Asp Pro Asp Glu Lys Ala Gln Asp Ser Lys Ala Tyr Ser
    130                 135                 140

Lys Ile Thr Glu Gly Lys Val Ser Gly Asn Pro Gln Val His Ile Lys
145                 150                 155                 160

Asn Val Lys Glu Asp Ser Thr Ala Asp Asp Ser Lys Asp Ser Val Ala
                165                 170                 175

Gln Gly Thr Thr Asn Val His Ser Ser Glu His Ala Gly Arg Asn Gly
            180                 185                 190

Arg Asn Ala Ala Asp Pro Ile Ser Gly Asp Phe Lys Glu Ile Ser Ser
        195                 200                 205

Val Lys Leu Val Ser Arg Tyr Gly Glu Leu Lys Ser Val Pro Thr Thr
    210                 215                 220

Gln Cys Leu Asp Asn Ser Lys Lys Asn Glu Ser Pro Phe Trp Lys Leu
225                 230                 235                 240

Tyr Glu Ser Val Lys Lys Glu Leu Asp Val Lys Ser Gln Lys Glu Asn
                245                 250                 255

Val Leu Gln Tyr Cys Arg Lys Ser Gly Leu Gln Thr Asp Tyr Ala Thr
            260                 265                 270

Glu Lys Glu Ser Ala Asp Gly Leu Gln Gly Glu Thr Gln Leu Leu Val
        275                 280                 285

Ser Arg Lys Ser Arg Pro Lys Ser Gly Gly Ser Gly His Ala Val Ala
    290                 295                 300

Glu Pro Ala Ser Pro Glu Gln Glu Leu Asp Gln Asn Lys Gly Lys Gly
305                 310                 315                 320

Arg Asp Val Glu Ser Val Gln Thr Pro Ser Lys Ala Val Gly Ala Ser
                325                 330                 335

Phe Pro Leu Tyr Glu Pro Ala Lys Met Lys Thr Pro Val Gln Tyr Ser
            340                 345                 350

Gln Gln Gln Asn Ser Pro Gln Lys His Lys Asn Lys Asp Leu Tyr Thr
        355                 360                 365

Thr Gly Arg Arg Glu Ser Val Asn Leu Gly Lys Ser Glu Gly Phe Lys
    370                 375                 380

Ala Gly Asp Lys Thr Leu Thr Pro Arg Lys Leu Ser Thr Arg Asn Arg
385                 390                 395                 400
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Thr Pro Ala Lys Val Glu Asp Ala Ala Asp Ser Ala Thr Lys Pro Glu
                405                 410                 415

Asn Leu Ser Ser Lys Thr Arg Gly Ser Ile Pro Thr Asp Val Glu Val
            420                 425                 430

Leu Pro Thr Glu Thr Glu Ile His Asn Glu Pro Phe Leu Thr Leu Trp
        435                 440                 445

Leu Thr Gln Val Glu Arg Lys Ile Gln Lys Asp Ser Leu Ser Lys Pro
    450                 455                 460

Glu Lys Leu Gly Thr Thr Ala Gly Gln Met Cys Ser Gly Leu Pro Gly
465                 470                 475                 480

Leu Ser Ser Val Asp Ile Asn Asn Phe Gly Asp Ser Ile Asn Glu Ser
                485                 490                 495

Glu Gly Ile Pro Leu Lys Arg Arg Arg Val Ser Phe Gly Gly His Leu
            500                 505                 510

Arg Pro Glu Leu Phe Asp Glu Asn Leu Pro Pro Asn Thr Pro Leu Lys
        515                 520                 525

Arg Gly Glu Ala Pro Thr Lys Arg Lys Ser Leu Val Met His Thr Pro
    530                 535                 540

Pro Val Leu Lys Lys Ile Ile Lys Glu Gln Pro Gln Pro Ser Gly Lys
545                 550                 555                 560

Gln Glu Ser Gly Ser Glu Ile His Val Glu Val Lys Ala Gln Ser Leu
                565                 570                 575

Val Ile Ser Pro Pro Ala Pro Ser Pro Arg Lys Thr Pro Val Ala Ser
            580                 585                 590

Asp Gln Arg Arg Arg Ser Cys Lys Thr Ala Pro Ala Ser Ser Ser Lys
        595                 600                 605

Ser Gln Thr Glu Val Pro Lys Arg Gly Gly Glu Arg Val Ala Thr Cys
    610                 615                 620

Leu Gln Lys Arg Val Ser Ile Ser Arg Ser Gln His Asp Ile Leu Gln
625                 630                 635                 640

Met Ile Cys Ser Lys Arg Arg Ser Gly Ala Ser Glu Ala Asn Leu Ile
                645                 650                 655

Val Ala Lys Ser Trp Ala Asp Val Val Lys Leu Gly Ala Lys Gln Thr
            660                 665                 670

Gln Thr Lys Val Ile Lys His Gly Pro Gln Arg Ser Met Asn Lys Arg
        675                 680                 685

Gln Arg Arg Pro Ala Thr Pro Lys Lys Pro Val Gly Glu Val His Ser
    690                 695                 700

Gln Phe Ser Thr Gly His Ala Asn Ser Pro Cys Thr Ile Ile Ile Gly
705                 710                 715                 720

Lys Ala His Thr Glu Lys Val His Val Pro Ala Arg Pro Tyr Arg Val
                725                 730                 735

Leu Asn Asn Phe Ile Ser Asn Gln Lys Met Asp Phe Lys Glu Asp Leu
            740                 745                 750
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Ser Gly Ile Ala Glu Met Phe Lys Thr Pro Val Lys Glu Gln Pro Gln
        755                 760                 765

Leu Thr Ser Thr Cys His Ile Ala Ile Ser Asn Ser Glu Asn Leu Leu
    770                 775                 780

Gly Lys Gln Phe Gln Gly Thr Asp Ser Gly Glu Glu Pro Leu Leu Pro
785                 790                 795                 800

Thr Ser Glu Ser Phe Gly Gly Asn Val Phe Phe Ser Ala Gln Asn Ala
                805                 810                 815

Ala Lys Gln Pro Ser Asp Lys Cys Ser Ala Ser Pro Pro Leu Arg Arg
            820                 825                 830

Gln Cys Ile Arg Glu Asn Gly Asn Val Ala Lys Thr Pro Arg Asn Thr
        835                 840                 845

Tyr Lys Met Thr Ser Leu Glu Thr Lys Thr Ser Asp Thr Glu Thr Glu
    850                 855                 860

Pro Ser Lys Thr Val Ser Thr Val Asn Arg Ser Gly Arg Ser Thr Glu
865                 870                 875                 880

Phe Arg Asn Ile Gln Lys Leu Pro Val Glu Ser Lys Ser Glu Glu Thr
                885                 890                 895

Asn Thr Glu Ile Val Glu Cys Ile Leu Lys Arg Gly Gln Lys Ala Thr
            900                 905                 910

Leu Leu Gln Gln Arg Arg Glu Gly Glu Met Lys Glu Ile Glu Arg Pro
        915                 920                 925

Phe Glu Thr Tyr Lys Glu Asn Ile Glu Leu Lys Glu Asn Asp Glu Lys
    930                 935                 940

Met Lys Ala Met Lys Arg Ser Arg Thr Trp Gly Gln Lys Cys Ala Pro
945                 950                 955                 960

Met Ser Asp Leu Thr Asp Leu Lys Ser Leu Pro Asp Thr Glu Leu Met
                965                 970                 975

Lys Asp Thr Ala Arg Gly Gln Asn Leu Leu Gln Thr Gln Asp His Ala
            980                 985                 990

Lys Ala Pro Lys Ser Glu Lys Gly Lys Ile Thr Lys Met Pro Cys Gln
        995                1000                1005

Ser Leu Gln Pro Glu Pro Ile Asn Thr Pro Thr His Thr Lys Gln Gln
   1010                1015                1020

Leu Lys Ala Ser Leu Gly Lys Val Gly Val Lys Glu Glu Leu Leu Ala
1025                1030                1035                1040

Val Gly Lys Phe Thr Arg Thr Ser Gly Glu Thr Thr His Thr His Arg
                1045                1050                1055

Glu Pro Ala Gly Asp Gly Lys Ser Ile Arg Thr Phe Lys Glu Ser Pro
            1060                1065                1070

Lys Gln Ile Leu Asp Pro Ala Ala Arg Val Thr Gly Met Lys Lys Trp
        1075                1080                1085

Pro Arg Thr Pro Lys Glu Glu Ala Gln Ser Leu Glu Asp Leu Ala Gly
   1090                1095                1100
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Phe Lys Glu Leu Phe Gln Thr Pro Gly Pro Ser Glu Glu Ser Met Thr
1105                1110                1115                1120

Asp Glu Lys Thr Thr Lys Ile Ala Cys Lys Ser Pro Pro Pro Glu Ser
                1125                1130                1135

Val Asp Thr Pro Thr Ser Thr Lys Gln Trp Pro Lys Arg Ser Leu Arg
            1140                1145                1150

Lys Ala Asp Val Glu Glu Glu Phe Leu Ala Leu Arg Lys Leu Thr Pro
        1155                1160                1165

Ser Ala Gly Lys Ala Met Leu Thr Pro Lys Pro Ala Gly Gly Asp Glu
    1170                1175                1180

Lys Asp Ile Lys Ala Phe Met Gly Thr Pro Val Gln Lys Leu Asp Leu
1185                1190                1195                1200

Ala Gly Thr Leu Pro Gly Ser Lys Arg Gln Leu Gln Thr Pro Lys Glu
                1205                1210                1215

Lys Ala Gln Ala Leu Glu Asp Leu Ala Gly Phe Lys Glu Leu Phe Gln
            1220                1225                1230

Thr Pro Gly His Thr Glu Glu Leu Val Ala Ala Gly Lys Thr Thr Lys
        1235                1240                1245

Ile Pro Cys Asp Ser Pro Gln Ser Asp Pro Val Asp Thr Pro Thr Ser
    1250                1255                1260

Thr Lys Gln Arg Pro Lys Arg Ser Ile Arg Lys Ala Asp Val Glu Gly
1265                1270                1275                1280

Glu Leu Leu Ala Cys Arg Asn Leu Met Pro Ser Ala Gly Lys Ala Met
                1285                1290                1295

His Thr Pro Lys Pro Ser Val Gly Glu Glu Lys Asp Ile Ile Ile Phe
            1300                1305                1310

Val Gly Thr Pro Val Gln Lys Leu Asp Leu Thr Glu Asn Leu Thr Gly
        1315                1320                1325

Ser Lys Arg Arg Pro Gln Thr Pro Lys Glu Glu Ala Gln Ala Leu Glu
    1330                1335                1340

Asp Leu Thr Gly Phe Lys Glu Leu Phe Gln Thr Pro Gly His Thr Glu
1345                1350                1355                1360

Glu Ala Val Ala Ala Gly Lys Thr Thr Lys Met Pro Cys Glu Ser Ser
                1365                1370                1375

Pro Pro Glu Ser Ala Asp Thr Pro Thr Ser Thr Arg Arg Gln Pro Lys
            1380                1385                1390

Thr Pro Leu Glu Lys Arg Asp Val Gln Lys Glu Leu Ser Ala Leu Lys
        1395                1400                1405

Lys Leu Thr Gln Thr Ser Gly Glu Thr Thr His Thr Asp Lys Val Pro
    1410                1415                1420

Gly Gly Glu Asp Lys Ser Ile Asn Ala Phe Arg Glu Thr Ala Lys Gln
1425                1430                1435                1440

Lys Leu Asp Pro Ala Ala Ser Val Thr Gly Ser Lys Arg His Pro Lys
                1445                1450                1455
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Thr Lys Glu Lys Ala Gln Pro Leu Glu Asp Leu Ala Gly Trp Lys Glu
          1460                1465                1470

Leu Phe Gln Thr Pro Val Cys Thr Asp Lys Pro Thr Thr His Glu Lys
      1475                1480                1485

Thr Thr Lys Ile Ala Cys Arg Ser Gln Pro Asp Pro Val Asp Thr Pro
  1490                1495                1500

Thr Ser Ser Lys Pro Gln Ser Lys Arg Ser Leu Arg Lys Val Asp Val
1505                1510                1515                1520

Glu Glu Glu Phe Phe Ala Leu Arg Lys Arg Thr Pro Ser Ala Gly Lys
               1525                1530                1535

Ala Met His Thr Pro Lys Pro Ala Val Ser Gly Glu Lys Asn Ile Tyr
          1540                1545                1550

Ala Phe Met Gly Thr Pro Val Gln Lys Leu Asp Leu Thr Glu Asn Leu
      1555                1560                1565

Thr Gly Ser Lys Arg Arg Leu Gln Thr Pro Lys Glu Lys Ala Gln Ala
  1570                1575                1580

Leu Glu Asp Leu Ala Gly Phe Lys Glu Leu Phe Gln Thr Arg Gly His
1585                1590                1595                1600

Thr Glu Glu Ser Met Thr Asn Asp Lys Thr Ala Lys Val Ala Cys Lys
               1605                1610                1615

Ser Ser Gln Pro Asp Leu Asp Lys Asn Pro Ala Ser Ser Lys Arg Arg
          1620                1625                1630

Leu Lys Thr Ser Leu Gly Lys Val Gly Val Lys Glu Glu Leu Leu Ala
      1635                1640                1645

Val Gly Lys Leu Thr Gln Thr Ser Gly Glu Thr Thr His Thr His Thr
  1650                1655                1660

Glu Pro Thr Gly Asp Gly Lys Ser Met Lys Ala Phe Met Glu Ser Pro
1665                1670                1675                1680

Lys Gln Ile Leu Asp Ser Ala Ala Ser Leu Thr Gly Ser Lys Arg Gln
               1685                1690                1695

Leu Arg Thr Pro Lys Gly Lys Ser Glu Val Pro Glu Asp Leu Ala Gly
          1700                1705                1710

Phe Ile Glu Leu Phe Gln Thr Pro Ser His Thr Lys Glu Ser Met Thr
      1715                1720                1725

Asn Glu Lys Thr Thr Lys Val Ser Tyr Arg Ala Ser Gln Pro Asp Leu
  1730                1735                1740

Val Asp Thr Pro Thr Ser Ser Lys Pro Gln Pro Lys Arg Ser Leu Arg
1745                1750                1755                1760

Lys Ala Asp Thr Glu Glu Glu Phe Leu Ala Phe Arg Lys Gln Thr Pro
               1765                1770                1775

Ser Ala Gly Lys Ala Met His Thr Pro Lys Pro Ala Val Gly Glu Glu
          1780                1785                1790
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Lys Asp Ile Asn Thr Phe Leu Gly Thr Pro Val Gln Lys Leu Asp Gln
1795 1800 1805

Pro Gly Asn Leu Pro Gly Ser Asn Arg Arg Leu Gln Thr Arg Lys Glu
1810 1815 1820

Lys Ala Gln Ala Leu Glu Glu Leu Thr Gly Phe Arg Glu Leu Phe Gln
1825 1830 1835 1840

Thr Pro Cys Thr Asp Asn Pro Thr Ala Asp Glu Lys Thr Thr Lys Lys
1845 1850 1855

Ile Leu Cys Lys Ser Pro Gln Ser Asp Pro Ala Asp Thr Pro Thr Asn
1860 1865 1870

Thr Lys Gln Arg Pro Lys Arg Ser Leu Lys Lys Ala Asp Val Glu Glu
1875 1880 1885

Glu Phe Leu Ala Phe Arg Lys Leu Thr Pro Ser Ala Gly Lys Ala Met
1890 1895 1900

His Thr Pro Lys Ala Ala Val Gly Glu Glu Lys Asp Ile Asn Thr Phe
1905 1910 1915 1920

Val Gly Thr Pro Val Glu Lys Leu Asp Leu Leu Gly Asn Leu Pro Gly
1925 1930 1935

Ser Lys Arg Arg Pro Gln Thr Pro Lys Glu Lys Ala Lys Ala Leu Glu
1940 1945 1950

Asp Leu Ala Gly Phe Lys Glu Leu Phe Gln Thr Pro Gly His Thr Glu
1955 1960 1965

Glu Ser Met Thr Asp Asp Lys Ile Thr Glu Val Ser Cys Lys Ser Pro
1970 1975 1980

Gln Pro Asp Pro Val Lys Thr Pro Thr Ser Ser Lys Gln Arg Leu Lys
1985 1990 1995 2000

Ile Ser Leu Gly Lys Val Gly Val Lys Glu Glu Val Leu Pro Val Gly
2005 2010 2015

Lys Leu Thr Gln Thr Ser Gly Lys Thr Thr Gln Thr His Arg Glu Thr
2020 2025 2030

Ala Gly Asp Gly Lys Ser Ile Lys Ala Phe Lys Glu Ser Ala Lys Gln
2035 2040 2045

Met Leu Asp Pro Ala Asn Tyr Gly Thr Gly Met Glu Arg Trp Pro Arg
2050 2055 2060

Thr Pro Lys Glu Glu Ala Gln Ser Leu Glu Asp Leu Ala Gly Phe Lys
2065 2070 2075 2080

Glu Leu Phe Gln Thr Pro Asp His Thr Glu Glu Ser Thr Thr Asp Asp
2085 2090 2095

Lys Thr Thr Lys Ile Ala Cys Lys Ser Pro Pro Pro Glu Ser Met Asp
2100 2105 2110

Thr Pro Thr Ser Thr Arg Arg Arg Pro Lys Thr Pro Leu Gly Lys Arg
2115 2120 2125

Asp Ile Val Glu Glu Leu Ser Ala Leu Lys Gln Leu Thr Gln Thr Thr
2130 2135 2140

His Thr Asp Lys Val Pro Gly Asp Glu Asp Lys Gly Ile Asn Val Phe
2145 2150 2155 2160

Arg Glu Thr Ala Lys Gln Lys Leu Asp Pro Ala Ala Ser Val Thr Gly
2165 2170 2175

Ser Lys Arg Gln Pro Arg Thr Pro Lys Gly Lys Ala Gln Pro Leu Glu
2180 2185 2190

Asp Leu Ala Gly Leu Lys Glu Leu Phe Gln Thr Pro Val Cys Thr Asp
2195 2200 2205

Lys Pro Thr Thr His Glu Lys Thr Thr Lys Ile Ala Cys Arg Ser Pro
2210 2215 2220

Gln Pro Asp Pro Val Gly Thr Pro Thr Ile Phe Lys Pro Gln Ser Lys
2225 2230 2235 2240

Arg Ser Leu Arg Lys Ala Asp Val Glu Glu Glu Ser Leu Ala Leu Arg
2245 2250 2255

Lys Arg Thr Pro Ser Val Gly Lys Ala Met Asp Thr Pro Lys Pro Ala
2260 2265 2270

Gly Gly Asp Glu Lys Asp Met Lys Ala Phe Met Gly Thr Pro Val Gln
2275 2280 2285

Lys Leu Asp Leu Pro Gly Asn Leu Pro Gly Ser Lys Arg Trp Pro Gln
2290 2295 2300

Thr Pro Lys Glu Lys Ala Gln Ala Leu Glu Asp Leu Ala Gly Phe Lys
2305 2310 2315 2320

Glu Leu Phe Gln Thr Pro Gly Thr Asp Lys Pro Thr Thr Asp Glu Lys
2325 2330 2335

Thr Thr Lys Ile Ala Cys Lys Ser Pro Gln Pro Asp Pro Val Asp Thr
2340 2345 2350

Pro Ala Ser Thr Lys Gln Arg Pro Lys Arg Asn Leu Arg Lys Ala Asp
2355 2360 2365

Val Glu Glu Glu Phe Leu Ala Leu Arg Lys Arg Thr Pro Ser Ala Gly
2370 2375 2380

Lys Ala Met Asp Thr Pro Lys Pro Ala Val Ser Asp Glu Lys Asn Ile
2385 2390 2395 2400

Asn Thr Phe Val Glu Thr Pro Val Gln Lys Leu Asp Leu Leu Gly Asn
2405 2410 2415

Leu Pro Gly Ser Lys Arg Gln Pro Gln Thr Pro Lys Glu Lys Ala Glu
2420 2425 2430

Ala Leu Glu Asp Leu Val Gly Phe Lys Glu Leu Phe Gln Thr Pro Gly
2435 2440 2445

His Thr Glu Glu Ser Met Thr Asp Asp Lys Ile Thr Glu Val Ser Cys
2450 2455 2460

Lys Ser Pro Gln Pro Glu Ser Phe Lys Thr Ser Arg Ser Ser Lys Gln
2465 2470 2475 2480

Arg Leu Lys Ile Pro Leu Val Lys Val Asp Met Lys Glu Glu Pro Leu
2485 2490 2495

Ala Val Ser Lys Leu Thr Arg Thr Ser Gly Glu Thr Thr Gln Thr His
2500 2505 2510

Thr Glu Pro Thr Gly Asp Ser Lys Ser Ile Lys Ala Phe Lys Glu Ser
2515 2520 2525

Pro Lys Gln Ile Leu Asp Pro Ala Ala Ser Val Thr Gly Ser Arg Arg
2530 2535 2540

Gln Leu Arg Thr Arg Lys Glu Lys Ala Arg Ala Leu Glu Asp Leu Val
2545 2550 2555 2560

Asp Phe Lys Glu Leu Phe Ser Ala Pro Gly His Thr Glu Glu Ser Met
2565 2570 2575

Thr Ile Asp Lys Asn Thr Lys Ile Pro Cys Lys Ser Pro Pro Pro Glu
2580 2585 2590

Leu Thr Asp Thr Ala Thr Ser Thr Lys Arg Cys Pro Lys Thr Arg Pro
2595 2600 2605

Arg Lys Glu Val Lys Glu Glu Leu Ser Ala Val Glu Arg Leu Thr Gln
2610 2615 2620

Thr Ser Gly Gln Ser Thr His Thr His Lys Glu Pro Ala Ser Gly Asp
2625 2630 2635 2640

Glu Gly Ile Lys Val Leu Lys Gln Arg Ala Lys Lys Lys Pro Asn Pro
2645 2650 2655

Val Glu Glu Glu Pro Ser Arg Arg Arg Pro Arg Ala Pro Lys Glu Lys
2660 2665 2670

Ala Gln Pro Leu Glu Asp Leu Ala Gly Phe Thr Glu Leu Ser Glu Thr
2675 2680 2685

Ser Gly His Thr Gln Glu Ser Leu Thr Ala Gly Lys Ala Thr Lys Ile
2690 2695 2700

Pro Cys Glu Ser Pro Pro Leu Glu Val Val Asp Thr Thr Ala Ser Thr
2705 2710 2715 2720

Lys Arg His Leu Arg Thr Arg Val Gln Lys Val Gln Val Lys Glu Glu
2725 2730 2735

Pro Ser Ala Val Lys Phe Thr Gln Thr Ser Gly Glu Thr Thr Asp Ala
2740 2745 2750

Asp Lys Glu Pro Ala Gly Glu Asp Lys Gly Ile Lys Ala Leu Lys Glu
2755 2760 2765

Ser Ala Lys Gln Thr Pro Ala Pro Ala Ala Ser Val Thr Gly Ser Arg
2770 2775 2780

Arg Arg Pro Arg Ala Pro Arg Glu Ser Ala Gln Ala Ile Glu Asp Leu
2785 2790 2795 2800

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Ala Gly Phe Lys Asp Pro Ala Ala Gly His Thr Glu Glu Ser Met Thr
                2805                2810                2815

Asp Asp Lys Thr Thr Lys Ile Pro Cys Lys Ser Ser Pro Glu Leu Glu
            2820                2825                2830

Asp Thr Ala Thr Ser Ser Lys Arg Arg Pro Arg Thr Arg Ala Gln Lys
        2835                2840                2845

Val Glu Val Lys Glu Glu Leu Leu Ala Val Gly Lys Leu Thr Gln Thr
    2850                2855                2860

Ser Gly Glu Thr Thr His Thr Asp Lys Glu Pro Val Gly Glu Gly Lys
2865                2870                2875                2880

Gly Thr Lys Ala Phe Lys Gln Pro Ala Lys Arg Asn Val Asp Ala Glu
                2885                2890                2895

Asp Val Ile Gly Ser Arg Arg Gln Pro Arg Ala Pro Lys Glu Lys Ala
            2900                2905                2910

Gln Pro Leu Glu Asp Leu Ala Ser Phe Gln Glu Leu Ser Gln Thr Pro
        2915                2920                2925

Gly His Thr Glu Glu Leu Ala Asn Gly Ala Ala Asp Ser Phe Thr Ser
    2930                2935                2940

Ala Pro Lys Gln Thr Pro Asp Ser Gly Lys Pro Leu Lys Ile Ser Arg
2945                2950                2955                2960

Arg Val Leu Arg Ala Pro Lys Val Glu Pro Val Gly Asp Val Val Ser
                2965                2970                2975

Thr Arg Asp Pro Val Lys Ser Gln Ser Lys Ser Asn Thr Ser Leu Pro
            2980                2985                2990

Pro Leu Pro Phe Lys Arg Gly Gly Gly Lys Asp Gly Ser Val Thr Gly
        2995                3000                3005

Thr Lys Arg Leu Arg Cys Met Pro Ala Pro Glu Glu Ile Val Glu Glu
    3010                3015                3020

Leu Pro Ala Ser Lys Lys Gln Arg Val Ala Pro Arg Ala Arg Gly Lys
3025                3030                3035                3040

Ser Ser Glu Pro Val Val Ile Met Lys Arg Ser Leu Arg Thr Ser Ala
                3045                3050                3055

Lys Arg Ile Glu Pro Ala Glu Glu Leu Asn Ser Asn Asp Met Lys Thr
            3060                3065                3070

Asn Lys Glu Glu His Lys Leu Gln Asp Ser Val Pro Glu Asn Lys Gly
        3075                3080                3085

Ile Ser Leu Arg Ser Arg Arg Gln Asp Lys Thr Glu Ala Glu Gln Gln
    3090                3095                3100

Ile Thr Glu Val Phe Val Leu Ala Glu Arg Ile Glu Ile Asn Arg Asn
3105                3110                3115                3120

Glu Lys Lys Pro Met Lys Thr Ser Pro Glu Met Asp Ile Gln Asn Pro
                3125                3130                3135
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Asp Asp Gly Ala Arg Lys Pro Ile Pro Arg Asp Lys Val Thr Glu Asn
          3140                3145                3150

Lys Arg Cys Leu Arg Ser Ala Arg Gln Asn Glu Ser Ser Gln Pro Lys
       3155                3160                3165

Val Ala Glu Glu Ser Gly Gly Gln Lys Ser Ala Lys Val Leu Met Gln
   3170                3175                3180

Asn Gln Lys Gly Lys Gly Glu Ala Gly Asn Ser Asp Ser Met Cys Leu
3185                3190                3195                3200

Arg Ser Arg Lys Thr Lys Ser Gln Pro Ala Ala Ser Thr Leu Glu Ser
                3205                3210                3215

Lys Ser Val Gln Arg Val Thr Arg Ser Val Lys Arg Cys Ala Glu Asn
          3220                3225                3230

Pro Lys Lys Ala Glu Asp Asn Val Cys Val Lys Lys Ile Thr Thr Arg
       3235                3240                3245

Ser His Arg Asp Ser Glu Asp Ile
   3250                3255
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synthetic oligonucleotide

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